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ABSTRACT

This study focused on the achievement of pupils in 64 schools that varied in: (1) the attitudes teachers held toward students, and (2) racial and economic characteristics. Teachers in these schools responded to 14 questions about their students. Schools were divided into two groups-above and below the mean on the score of the 14 items. Two way analyses of variance (Teacher Attitudes by School Characteristics) were then carried out on each of seven dependent measures of the Stanford Achievement Tests. The main effect of teacher attitudes was not significant for each of the dependent measures. There was some significant difference, however, in poor black schools depending on teacher attitudes. The second objective of the study was to determine the relationship between teachers' attitudes toward students and students' attitudes toward school. The main effect of teacher attitude was significant for only one dimension of student attitudes, that of community support of and parental involvement in the schools. Teacher attitude and interaction effects observed seem not to be due to teacher attitudes, but to socioeconomic differences between the schools. (KJ)

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THE RELATIONSHIP BETWEEN TEACHERS' ATTITUDES TOWARD PUPILS AND PUPILS' ATTITUDES AND ACHIEVEMENT[1]

A Paper Presented at AERA
Minneapolis, Minn., March 2, 1970
Bruce M. Gansneder

This study had two major objectives: 1) to determine the relationship between teachers' attitudes toward students and the students' performance in school; and, 2) to determine the relationship between teachers' attitudes toward students and the students' attitudes toward school. The "self-fulfilling prophecy" as stated by K. Clark (1963) - "If a child is expected to perform poorly, he will think that he cannot perform well and he will indeed perform poorly" - provides the general conceptual framework for this study.

A brief review of past evidence on these relationships may be helpful here. Three kinds of indirect evidence have been advanced to support the contention that teachers' attitudes toward students affect their performance in school. The first is the finding that poor achievement, especially in lower class schools, is cumulative (e.g. Becker, 1952; Kahl, 1951; and Gansneder, 1968.) Simply, the longer the lower class child remains in school, the lower his achievement scores drop below grade level. Certainly this may be completely independent of teachers' attitudes toward students. It is equally plausible that the difficulty of these tests increases at a higher rate than does the students' abilities. Not having learned basic skills at lower grade levels may present serious

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[1]This study is presently being undertaken as partial fulfillment of doctoral program requirements of the College of Education at The Ohio State University.

obstacles for these students in later grades. The second kind of indirect evidence is the "halo effect" (e.g., Cahen, 1966; Sattler, Hillex, and Neher, 1967: and Jacobson, 1966). In this context, this theory suggests that teachers' attitudes about students will affect perceptions of students' performance in school. But the only direct effect would be on the teachers' judgments about students' performance, not on the actual performance. A third kind of indirect evidence is the finding that children who are bussed to a "better" school perform better (Jonsson, 1967; Beker, 1967). Performance increase is found but the cause is not known. The "better"school may have "better" facilities, a "better" curriculum, "better" teachers, and a "better" general atmosphere for learning and more peer group support for academic achievement. Recently four experimental studies of this phenomenon have been carried out. Two of these (e.g. Pitt, 1956; and Flower, 1966) failed to confirm the hypothesis. Two confirmed the hypothesis (e.g. Beez, 1967: and Rosenthal, 1969) but that by Beez dealt with individualized instruction and may not generalize to the classroom, and that by Rosenthal has been criticized for its measurement, analytical design, and project management.

The relationship between teachers' attitudes toward students and students' attitudes toward the teacher and school has consistently been reported to be a low positive one (e.g. Bush, 1954; Jackson and Getzels, 1959: Getzels and Jackson, 1963: Jackson and Lahaderne, 1967; and Yee, 1968). The study by Yee (1968) is of particular interest here. He attempted to tease out the casual relationships and reported two major findings: 1) teacher attitudes cause pupil attitudes to change more than pupil attitudes cause teacher attitudes to change,

and, 2) teacher attitudes had the most significant effect on pupil attitudes in the lower class schools. Students in lower class schools who had positive teachers became more positive while students who had negative teachers became more negative.

THE SETTING FOR THIS STUDY

In the Spring of 1968 (Cunningham, et. al., 1968) a school system evaluation was undertaken in a large middle western city school system. The objective of the study was to explore the problems facing the school system and to recommend solutions to some of these problems. In the course of the study, student achievement test data were collected and a smaller sample of students was surveyed to determine their attitudes toward the schools. Teachers responded to questionnaires concerning personal characteristics and their attitudes toward the schools and their students. The present research employs portions[2] of these data to explore the two major objectives stated previously. The focus is on schools as opposed to classes or individual students.

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[2]Due to the fact that students' attitudes were only measured in a small sample of schools and to the fact that the school system employed non-systematic achievement testing procedures, only those schools in which equivalent measures were employed are studied.

INSTRUMENTATION

Teachers' attitudes toward students were measured by a set of fourteen items. These consisted of ten likert type items concerning students' motivation, speech, aspirations, discipline, attendance, achievement, self-image, health, and general "type", two likert type items concerning student-faculty relations and pupil acquaintance with the total community, and two items regarding reasons for poor performance. A composite measure of these will be presented in this report. The school system allowed the option of using the Stanford tests, the California tests, or the Metropolitan tests to measure achievement. Only sixth grade students from schools using the Stanford tests were studied in this phase of the project. Student attitudes were measured by the School Morale Scale (Wrightsman, 1968). It includes seven dimensions: morale about school plant; morale about instructions and instructional materials; morale about administration, regulations, and staff; morale about community support of schools and parental involvement in the schools; relationships with other pupils; morale about teacher-student relationships; and general feelings about attending schools.

DESIGN AND ANALYSIS

The study focused on schools as the sampling unit and involved the convenience use of schools where equivalent measures were available. The original plan was to carry out the two objectives in schools characterized differentially by the socioeconomic status of the students in the school as

measured by the percent of students in the school whose families were receiving ADC. Due to the availability of data and to de facto segregation, new strategies had to be devised for the test of each objective. For this reason, the design and analysis of each objective is presented separately in this report.

Objective 1 - To determine the relationship between teacher attitudes and pupil achievement.

Sixty-four schools were available for this analysis. It became readily apparent that in the schools available for the analysis there was a confounding due to school racial characteristic. The school system studied, as is true of most urban school systems, is segregated by social class and also by race within social class. It was clear that a school racial characteristic breakdown within social class was necessary. Further, there were no "middle-class" black schools available for the analysis of objective 1. Three school characteristic categories were thus developed: "poor black" schools; "poor white" schools; and "middle class white" schools. Schools were then further divided as above or below the mean of the sample on the composite teacher attitude score. The resulting sample is shown in Table 1. Sixty-four schools were available for this analysis. Twelve were classified as "poor black", eleven as "poor white", and forty-one as "middle class white". Fifty-nine percent of the schools were below the mean on Teacher Attitudes and forty-one percent were above the mean. The percentages above and below the mean for "middle class white" schools and "poor white" schools approximated that of the total sample. But sixty-six percent of the "poor black" schools were below the mean. Other researchers

(e.g. Herriot and St. John, 1966) have reported low teacher attitudes in lower class schools. These data confirm that finding for lower class black schools, but also indicate low teacher attitudes toward students in "poor white" and "middle class" schools.

The Racial Characteristics of these schools[3] are presented in Table 2. Schools characterized as "poor black" had a black student population ranging from thirty-two percent to one hundred percent. The average percent black students is slightly higher in the schools with teacher attitudes above the mean. Schools characterized as "poor white" had a range of from one to eleven percent black students. The average percent black students was again slightly higher in schools with teacher attitudes above the mean. In schools characterized as "middle class white", there was a range from 0 to 16.8 percent black students. The upper limit of the range was due to one school which had 16.8 percent black students. All other schools had five percent or less black students. The average percent black students was higher in the schools where teachers' attitudes were below the mean. This was due primarily to the one school mentioned above.

The ADC Characteristics of these schools is presented in Table 3. Schools characterized as "poor black" had ADC populations ranging from ten to fifty-six percent. The average ADC percentage was slightly higher in the schools with teacher attitudes above the mean. "Poor white" schools had ADC populations ranging from ten to twenty-five percent. The average percent ADC was slightly higher in the schools that were below the mean on teacher attitudes. The percent ADC range in the "middle class" white schools was from zero to seven percent. This average was slightly higher in schools above the mean on Teacher Attitudes.

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[3]The percent of black people in the population of the city studied is approximately eighteen.

TABLE 1 : Final Sampling for Analysis of Objective 1.

	Teacher Attitude		
	Below the Mean	Above the Mean	Total
"Poor Black"	8	4	12
"Poor White"	6	5	11
"Middle Class White"	24	17	41
TOTAL	38	26	64

TABLE 2 : Racial Characteristics of the Schools Analyzed for Objective 1.

	Teacher Attitude			
	Below the Mean		Above the Mean	
	Mean	Range	Mean	Range
"Poor Black"	62.36	32-100	65.00	39-100
"Poor White"	04.17	1-11	5.40	1-11
"Middle Class White"	02.70	0.0-16.8	0.60	0.0-4.4

TABLE 3: ADC Characteristics of the Schools Analyzed for Objective 1.

	Teacher Attitude			
	Below the Mean		Above the Mean	
	Mean	Range	Mean	Range
"Poor Black"	29.29	10-56	32.25	22-46
"Poor White"	17.50	10-25	15.40	10-20
"Middle Class White"	00.90	0-5	01.70	0-7

TABLE 4: Summary of Analyses of Variance for Objective 1. [4]

	Teacher Attitude	School Characteristic	T.A. by S.C
Stanford Word Meaning	not significant	$p < .001$	$p < .01$
Stanford Paragraph Meaning	not significant	$p < .001$	$p < .06$
Total Reading Score	not significant	$p < .001$	$p < .02$
Arithmetic Computation	not significant	$p < .001$	$p < .06$
Arithmetic Concepts	not significant	$p < .001$	$p < .15$
Arithmetic Applications	not significant	$p < .001$	$p < .12$
Total Arithmetic Score	not significant	$p < .001$	$p < .04$

[4] Probabilities given are two tailed probability levels for F. The main effect of Teacher Attitudes has 1,57 df., the main effect of school characteristic has 2,57 df., and the interaction has 1,57 df.

The dependent measure employed was the average achievement score for all sixth grade students in each school studied. Seven scores from the Stanford Achievement Tests (1964) were collected. These were Word Meaning, Paragraph Meaning, Total Reading, Arithmetic Computation, Arithmetic Concepts, Arithmetic Applications, and Total Arithmetic. A two-way (Teacher Attitude by School Characteristic) analysis of variance was carried out on each of the seven dependent measures. A summary of these analyses is presented in Table 4.

The main effect of Teacher Attitude was not significant for any of the seven dependent measures. Simply this means that when all schools were considered, the average achievement of students in schools with teacher attitudes above the mean does not differ from that of students in schools where teacher attitudes are below the mean. The main effect of School Characteristics refers to the differentiation between "poor black", "poor white", and "middle-class white" schools. The main effect was significant (p .001) for each of the seven dependent measures. In each case the average achievement score was highest for the students from the "middle-class white" schools, followed by that of the students from "poor white" schools, and the average achievement of students from "poor black" schools was lowest. The outcomes of the interaction tests are presented in the right hand column of Table 4. Although some of the probabilities do not reach conventional levels of significance, all are presented in order to indicate the pattern of these results. In each case the probability of the F approaches a meaningful significance level. The interaction test simply is a test to determine whether or not the relationship between teacher attitudes and pupil achievement hold for each of the school

characteristic levels. The non-significant main effect indicated that across all schools there was no relationship between teacher attitudes and studnet achievement. A significant interaction indicates that for one or more of the school characterisitc groups there is a relationship between teacher attitudes and student achievement. As can be seen in Table 4, the most definite interactions occur on the two reading subscores and the reading total score. The interaction effects for the math scores are not so strong although the interaction effect for the total math scores is significant at p .04. With respect to total reading scores, there is no difference at p .05 between "middle class white" schools characterized differentially by teacher attitudes. Similarly there is no difference in the achievement scores of the two attitude groups in "poor white" schools. But the achievement scores fo students in "poor black" schools where teacher attitudes are above the mean is significantly higher (p .05) that the achievement scores of students in "poor black" schools where teacher attitudes are below the mean. This difference was also significant (p .05) for the Stanford Word Meaning scores, but not for the Paragraph Meaning or Total Arithmetic Scores. Although conventional statistical significance levels were reach on only two of the measures, the basic interaction patterns were the same for all seven measures.

Summary and Conclusions of Objective 1

This study focused on the achievement of pupils in sixty-four schools that varied in terms of the attitudes toward students held by teachers and in terms of the recial and economic characteristics of the school. Teachers in these schools responded to fourteen questions about their students. Schools

were divided into two groups -- those below the mean and those above the mean on the total score of fourteen items. The sixty-four schools were similarly divided into "poor" schools having large percentages (thirty-two percent or more) of black students, "poor" schools having mostly white students, and "middle class" white schools. Schools in which ten percent or more of the students were on A.D.C. were categorized "poor".

Two-way analyses of variance (Teacher Attitudes by School Characteristic) were then carried out on each of seven dependent measures of the Stanford Achievement tests. The main effect of teacher attitudes was not significant for any of the achievement measures. The main effect of school characteristic was significant for each of the dependent measures. In each case, the achievement scores were higher in "middle class white" schools than in "poor white" schools, than in "poor black" schools. The interaction effects tended toward significance on each of the measures but reached conventional significance levels only on the word meaning test, the total reading score, and the total arithmetic score. The significant interactions were due to the fact that achievement scores in porr black schools where teachers' attitudes were above the mean were significantly higher than achievement scores in poor black schools where teacher attitudes scores were below the mean. No differences were found between the attitude groups in "poor white" schools or in "middle-class white" schools. Although the interaction effect was not statistically significant on the other achievement measures, similar patterns were observed.

The finding of significant main effects of school characteristics is not a surprising one. Many researchers have reported both a relationship between

socioeconomic status and achievement and a relationship between race and achievement. The non-significant main effects of teacher attitudes was surprising to this researcher. But it may be that school factors have differential effects on different kinds of students. This, of course, is indicated by the interactions observed. The results are similar to Coleman's (1966) finding that school factors affect black students more than white students and Richer's (1968) finding that school factors affect low I.Q. students more than high I.Q. students.

The differential effect of teacher attitudes in the "poor black" schools would be expected from Coleman's (1966) finding. The question of a priori differences in students is always a concern in this kind of research. No I.Q. data were available for these analyses and so this factor cannot be checked. The data present in Table 2 and Table 3 provide some information on a priori factors. In the "poor black" schools there was no significant difference between the two attitude groups on either percent of black students or on the percent of A.D.C. students. It seems resonable to assume that the observed differences in achievement were due to differences in teacher attitudes. But Richer's (1968) finding would predict a similar effect in the "poor white" schools. In the "poor white" schools there was no significant difference between the two attitude groups on either the percent black students or on the percent of A.D.C. students. But the percent of A.D.C. students in these schools was still relatively high; it may be that the level of deprivation in these schools was not severe enough to enable the school level effect of teacher attitudes to affect the achievement of the students.

Objective 2 - To determine the relationship between teachers' attitudes toward students and students' attitudes toward school.

Twenty-seven schools were available for this analysis. It was impossible to make the same kinds of breakdowns on school characteristics that were made for the study of objective one. The schools were thus characterized as "black" or "white" and also divided into below and above the mean on teacher attitudes. The resulting sample is shown in Table 5. Fifteen schools were classified as "black "and twelve schools were classified as "white". As in the first sample fifty-nine percent of the schools were below the mean in Teacher Attitudes and forty-one percent were above the mean. Fifty-three percent of the "black " schools were below the mean on Teachers Atitudes while sixty-six percent of the "white" schools were below the mean.

The racial characteristics of these schools are presented in Table 6. Schools characterized as "black" had a black student population ranging from twenty-one to ninety-nine percents. Schools characterized as white had a black student population ranging from zero percent to ten percent. In the black schools, the average percent black students was higher in schools in which the teachers' attitudes were above the mean than in schools in which the teachers' attitudes were below the mean. In the "white" schools, the average percent black students was slightly higher in schools where teachers' attitudes were above the mean. The A.D.C. characteristics of the schools are presented in Table 7. In the "black" schools, the average percent A.D.C. students was higher where teachers' attitudes were below the mean than where they were above the mean. This was also true in the "white" schools.

Table 5 - Final Sampling for Analysis of Objective 2.

Teacher Attitudes

School Characteristic	Below the Mean	Above the Mean	Total
"Black"	8	7	15
"White"	8	4	12
TOTAL	16	11	27

Table 6 - Racial Characteristics of the Schools Analyzed for Objective 2.

Teacher Attitudes

School Characteristic	Below the Mean		Above the Mean	
	Mean	Range	Mean	Range
"Black"	65.6	21-99	82.1	53-92
"White"	3.7	0-10	2.2	0-4

Table 7 - A.D.C. Characteristics of the Schools Analyzed for Objective 2.

Teacher Attitudes

School Characteristic	Below the Mean		Above the Mean	
	Mean	Range	Mean	Range
"Black"	28.7	22-48	23.4	4-50
"White"	8.4	0-24	2.0	0-4

Table 8 - Summary of Analysis of Variance for Objective 2. *

Student Attitudes	Teacher Attitude	School Characteristic	T.A. by S.C.
School Plant	n.s.	$p < .002$	n.s.
Instruction	n.s.	n.s.	n.s.
Administration	n.s.	n.s.	n.s.
Community Support	$p < .05$	$p < .001$	$p < .04$
Pupil - Relationships	n.s.	$p < .002$	n.s.
Teacher-Student Relationships	n.s.	$p < .01$	n.s.
General Feeling about School	n.s.	$p < .01$	n.s.
TOTAL	n.s.	$p < .01$	n.s.

* Each effect has 1 and 23 d.f.

The dependent measure employed was the average attitude score for the sixth grade students studied in each of the schools. Student attitudes were measured by the School Morale Scale (Wrightsman, et.al., 1968). This scale includes seven dimensions and a total score. The seven dimensions are morale about the school plant, morale about instruction and instructional materials, morale about the administration and regulations, morale about community support of schools and parental involvement in the schools, relationships with other pupils, morale about student-teacher relationships, and general feelings about attending school. A two-way (Teacher Attitude by School Characteristic) analysis of variance was carried out on each of the seven dependent measures and on the total morale score. A summary of these is presented in Table 8.

The main effect of teacher attitude was significant for only one dimension of student attitudes, that of community support of and parental involvement in the schools. In the schools in which teachers attitudes were above the mean, students felt more positively about community support and parental involvement. With respect to the other dimensions, students in these schools did feel more positively than students in schools where teachers attitudes were below the mean. The main effect of school characteristics was significant on five of the dimensions of attitude scale and on the total attitude score. Students in the "white" schools felt more positively than the students in the "black" schools about school plant, community support, pupil relationships, teacher-student relationships, general feelings about school and their total attitude score was also higher. There were no differences between students in "black"

and "white" schools with regard to attitudes about instruction or about administration. Only one significant interaction occurred. This was on the community support dimension of the attitude scale. This was due to the fact that there was no difference on this dimension between the attitudes of students in black schools where teachers' attitudes were below the mean and those where teachers' attitudes were above the mean. But in white schools, the students in schools where teachers' attitudes were above the mean felt more positively about the community support than students in schools where teachers' attitudes were below the mean.

Summary and Conclusions for Objective 2.

The study of the relationship between teacher attitudes and pupil attitudes was able to be carried out on twenty-seven schools. This small sample necessitated the categorization of schools only as either "black" or "white". The further economic division could not be carried out. Students in schools where teachers' attitudes were above the mean felt more positively about community support of the schools and parental involvement in the schools than did students in schools where teacher attitudes were below the mean. No other main effect of teacher attitudes occurred. As these schools tended to have fewer A.D.C. students, it is most likely that the difference in feelings about community support are due not to teacher attitudes, but to differences in school SES. The school characteristic main effect was significant for five of the seven attitude dimensions and for the total attitude score. In each case, students in the "black" schools have less positive attitudes than students in the "white"

schools. Only one significant Teacher Attitude by School Characteristic interaction occurred. This was on the subdimension of community support. The interaction was due to the fact that in the "white" schools students in schools where teachers attitudes were above the mean felt more positively about community support than students in schools where teachers attitudes were below the mean. In the "black" schools there was no difference due to teacher attitudes. Again it seems that the difference in the "white" schools is due not to teachers' attitudes but to socioeconomic status differences between the schools. In sum, although the finding of low attitudes is consistent with earlier research findings, the teacher attitude and interaction effects observed seem to be due not to teacher attitudes, but to socioeconomic status differences between the schools.

REFERENCES

Becker, Howard S., "The Career of the Chicago Public Schoolteacher", American Journal of Sociology, LVII, 1952, pp.470-477.

Beez, W. V., "Influence of Biased Psychological Reports in Teacher Behavior," unpublished manuscript, Indiana University, 1967.

Beker, Jerome. A Study of Integration in Racially Imbalanced Urban Public Schools. A Demonstration and Evaluation, Final Report. Syracuse, New York: Syracuse University Youth Development Center, May 1967.

Bush, Robert Nelson, The Teacher-Pupil Relationship, Englewood, N.J., Prentice Hall, 1954.

Cohen, L.S., "Experimental Manipulation of Bias in Teachers' Scoring of Subjective Tests," paper read at American Psychological Association , New York, September, 1966.

Clark, Kenneth, "Learning Obstacles Among Children" in Arliss L. Roaden (ed) Problems of School Men in Oppressed Urban Centers , Columbus, Ohio: College of Education, The Ohio State University, 1969, pp.27-37.

Coleman, James S. et. al., Equality of Educational Opportunity. Washington, D. C. : United States Government Printing Office, 1966.

Cunningham, L. C., A Report to the Columbus Board of Education , Columbus, Ohio, The Ohio State University, 1968.

Flowers, C. E., "Effects of an Arbitrary Accelerated Group Placement on the Tested Academic Achievement of Educationally Disadvantaged Students", unpublished doctoral dissertation, Teachers College, Columbia University, 1966.

Gansneder, B., "Student Achievement", in Cunningham, L. C., A Report to the Columbus Board of Education, Columbus, Ohio, The Ohio State University, 1968.

Getzels, J. W. and Jackson, P. W., "The Teacher's Personality and Characteristics," in N. L. Gage (Ed.) Handbook of Research in Teaching, Chicago: Rand McNally, 1963.

Jackson, R. W. and Getzels, J. W. Psychological Health and Classroom Functioning: A Study of Dissatisfaction with School Among Adolescents, Journal of Educational Psychology , 1959, 50, pp.295-300.

Jackson, P. W. and Lahaderne, H. M., "Scholastic Success and Attitude Toward School in a Population of Sixth Graders", Journal of Educational Psychology, 1967, 58, 15-18.

Jacobson, Lenore, "Explorations of Variations in Education Achievement Among Mexican Children, Grades One to Six," unpublished doctoral dissertation, University of California, Berkeley, 1966.

Jonsson, Harold A. Report of Evaluation of ESEA Title I Compensatory Activities for 1966-67. Berkeley, California: Berkeley Unified School District, 1967.

Kahl, J. A., "Common-Man Boys", in Halsey, A. H., et. al. (Eds.) Education, Economy, and Society , New York: Free Press, 1961, pp. 348-366.

Pitt, C. V., "An Experimental Study of the Effects of Teachers' Knowledge or Incorrect Knowledge of Pupils' I.Q.'s in Teachers' Attitudes and Practices and Pupils' Attitudes and Achievement," unpublished doctoral dissertation, Columbia University, 1956.

Richer, Stephen, "Programme Grouping and Educational Plans: A Study of Canadian High School Students, Doctors Thesis, Baltimore, Md.: Johns Hopkins University, 1968.

Sattler, J. M., et. al, "The Halo Effect in Examiner Scoring of Intelligence Test Responses," unpublished paper, San Diego State College, 1967.

Stanford Achievement Tests, Intermediate II. Battery, Harcourt Brace and World, Inc., New York, 1964.

Wrightsman, L. S., et. al., "The Construction and Validation of a Scale to Measure Children's School Morale", unpublished paper, George Peabody College for Teachers, 1968.

Yee, Albert H., "Source and Direction of Causal Influence in Teacher-Pupil Relationships," Journal of Educational Psychology, August, 1968.